

## List of next generation immunodeficient mice

<b>NOG-IL5 (NOG-hIL-5 Tg)</b>	
Strain name	NOD.Cg-Prkdc<scid> Il2rg<tm1Sug> Tg(CMV-IL5)/Jic
Strain description	Transgenic NOG mice that systemically express the human IL-5 gene. When human hematopoietic stem cells are transferred, eosinophils are significantly differentiated.
Strain development	Human IL-5 cDNA was synthesized from mRNA extracted from hu-CD4+ T cells stimulated with 10 ng/ml PMA (MilliporeSigma) and 1 µg/ml IM (MilliporeSigma) in RPMI1640 medium (Thermo Fisher Scientific) for 4 hours at 37°C in 5% CO <sub>2</sub> . The cDNA was inserted into the pCMVβ vector (Takara Bio USA Inc.) and linearized by digestion with EcoRI and HindIII restriction enzymes. Linearized fragments were injected into NOD/NOG F1 mouse embryos. Offspring with the transgenes were backcross-mated to NOG mice to introduce the scid and IL-2γ(null) genes.
Research application	Used as a human eosinophil asthma model
References	Ito R. et al. (2018) A humanized mouse model to study asthmatic airway inflammation via the human IL-33/IL-13 axis. JCI Insight. Nov 2;3(21):e121580.
URL	<a href="https://pubmed.ncbi.nlm.nih.gov/30385714/">https://pubmed.ncbi.nlm.nih.gov/30385714/</a>
Remarks	-